



Cotton/Soybean Insect Newsletter

Volume 15, Issue #5 Edisto Research & Education Center in Blackville, SC

5 June 2020

Pest Patrol Alerts

The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter “y” to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at [@bugdocisin](#) on Twitter.



News from Around the State

Jonathan Croft, county agent covering Orangeburg, Berkeley, and Dorchester Counties, reported again that he had “no reports of any problems this week.” **Hannah Mikell**, county agent in Clarendon County, also reported no problems with insects in her area. We are in that place between managing thrips on seedling cotton and blooming cotton, and in that window, we need to be checking for plant bugs, aphids, and spider mites. More about that below in the **Cotton Insects** section.

Have a Minute for a Short Survey?

This section of the newsletter contains a survey link. The questions this week pertain to Bt corn and how options with that crop affect management of insects later in cotton. So, if you grow corn or manage insects in the crop, please click on the link below and answer the short survey (takes only a minute or two), if you have time. It would be much appreciated. This survey will be active for 2 weeks. I will report the results back here, if enough folks complete the survey (providing meaningful results to summarize). Thanks!

https://clemson.ca1.qualtrics.com/jfe/form/SV_8BRCf4byzUKE4yV

Cotton Situation

As of 31 May 2020, the USDA NASS South Carolina Statistical Office estimated that about 73% of the crop has been planted, compared with 56% at this time last week, 93% at this time last year, and 82% for the 5-year average. The condition of the crop was described as 5% excellent, 46% good, 32% fair, 11% poor, and 6% very poor. These are observed/perceived state-wide averages.

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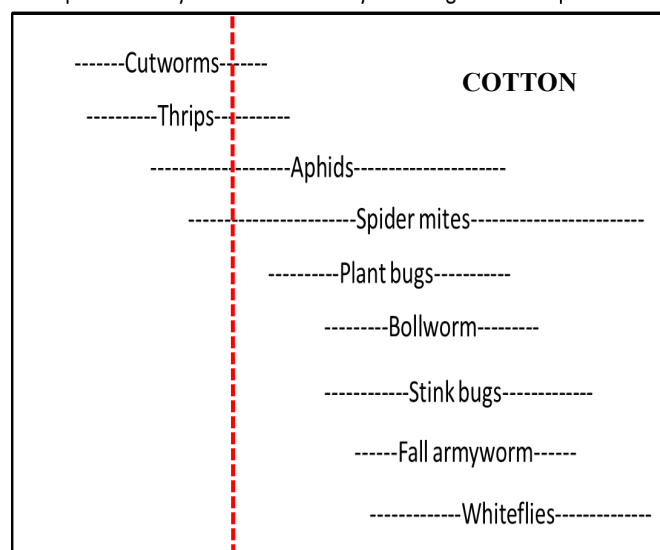
Cotton Insects

We are getting through the thrips window quickly, as cotton is growing fast. Thrips were moderate to heavy in my plots this season and caused much injury to under- and un-protected plants. Check out this UTC seedling that is supposed to have 6 true leaves on it.



6-leaf cotton seedling with no insecticide protection

April May June July August September



If you are still scouting seedling cotton (less than 5 true leaves) and spraying for thrips, here are our recommendations for broadcast treatment with insecticides.

THRIPS

Product (foliar sprays)	Product/acre	Lb ai/acre	Acre/gal	REI	PHI	Comments
dicrotophos (R) Bidrin 8 E	3.2 oz	0.2	40	3 d	30 d	3.2 oz limit pre-bloom
acephate Orthene/Acephate 97 Orthene/Acephate 90	3.0 oz 3.2 oz	0.18	- -	24 hr	21 d	
dimethoate Dimethoate 4 EC	8.0 oz	0.25	16	48 hr	14 d	
spinetoram Radiant 1 SC	1.5-3.0 oz	0.0117- 0.0234	42.7-85.3	4 hr	28 d	Adjuvant recommended

The high rate of aldicarb should also provide some protection against nematodes and suppress early populations of aphids and spider mites. When cotton is planted after May 20, seed treatments have proven to be effective in limiting thrips damage to seedling cotton plants. Generally, a preventative insecticide used at planting will protect seedlings from severe stunting characteristic of thrips injury. Occasionally, however, conditions will be unfavorable for proper uptake of systemic insecticides (too cool, dry soil, excessive moisture, etc.), and plants can be severely damaged. **Foliar treatments will be most effective when applied to cotton seedlings prior to unfolding of the second true leaf.** A foliar insecticide treatment may be needed when two or more thrips are found per plant. Shake each plant (randomly select 25 or more) into a large, white cup or on a white cloth or paper to facilitate counting of adults. Use a black cup or cloth for immatures. When most plants have severely damaged growing points and immature thrips are present, one or more foliar treatments may be needed to allow the plants to resume normal growth and development. Examine plants 5-7 days after the initial treatment, and treat again if immatures are still present on most plants. When the newly unfolded leaves of infested plants

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are free of damage and plants appear to be growing at a normal rate, further applications of insecticides will have little benefit. **Treatments applied beyond the four-leaf stage of growth may be counterproductive**, as these reduce beneficial populations and often result in problems with other pests. Although effective, acephate can flare populations of spider mites and aphids.

We do have a promising technology on the horizon for helping manage thrips in cotton. In-plant Bt technology has been tweaked to provide suppression of plant bugs, and we discovered along the way that it sustained less injury from thrips. The technology (at right below) will be available in the next couple of seasons, and it looks pretty good compared with similar cotton treated with a seed treatment (left).



We find ourselves during the next few weeks in that window between managing seedlings for thrips and blooming cotton, after which we can have a number of issues with insects. In this window of time remaining for vegetative growth, we need to watch out and scout for aphids, plant bugs, and spider mites. We will discuss those arthropods more in the next few newsletters. Start looking for infestations of aphids and symptoms of the Cotton Leaf Roll Dwarf Disease (CLRDD) we have been discussing in recent years. Look for spots with issues with spider mites. Check early square retention, and get out your sweep net to check for plant bug adults. We will talk more about these issues for the next few weeks.

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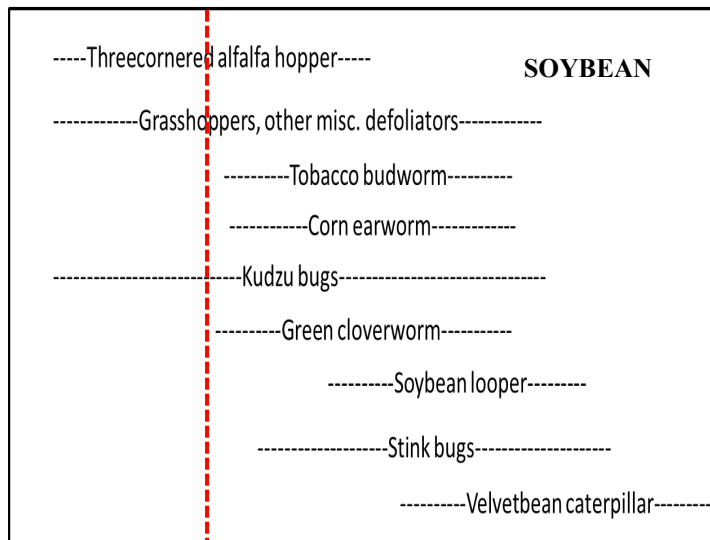
Soybean Situation

As of 31 May 2020, the USDA NASS South Carolina Statistical Office estimated that about 49% of the crop has been planted, compared with 37% the previous week, 40% at this time last year, and 50% for the 5-year average. About 33% of the crop has emerged, compared with 21% the previous week, 24% at this time last year, and 31% for the 5-year average. The condition of the crop was not yet described. These are observed/perceived state-wide averages.

Soybean Insects

Same as last few weeks – there is still not a lot of activity with insects in soybeans, other than grasshoppers in some locations. As you know, deer are still an issue on any soybeans planted early, so repellents or fencing are about the only options there. If you go with the soap-based repellents, you can get some suppression of insects, as some formulations are designed to be an insecticidal soap. Again this week, no arthropods seem to be causing any issues in early planted soybeans I have in a planting date study at Edisto REC. At this time last year, early planted soybeans were covered with kudzu bugs. I have yet to see the first one in the field in my early plots. Other states are reporting high numbers of kudzu bugs on early soybeans, so they will likely experience what we observed last season in SC, with kudzu bugs being very numerous and requiring treatment in many locations. So, for now, we might be okay, but take a look at your early crop for signs of grasshoppers, threecornered alfalfa hoppers, kudzu bugs, and any other insect that likes to feed on vegetative soybeans. Insects love soybeans, and they are just out there and susceptible to many insect pests!

April May June July August September October



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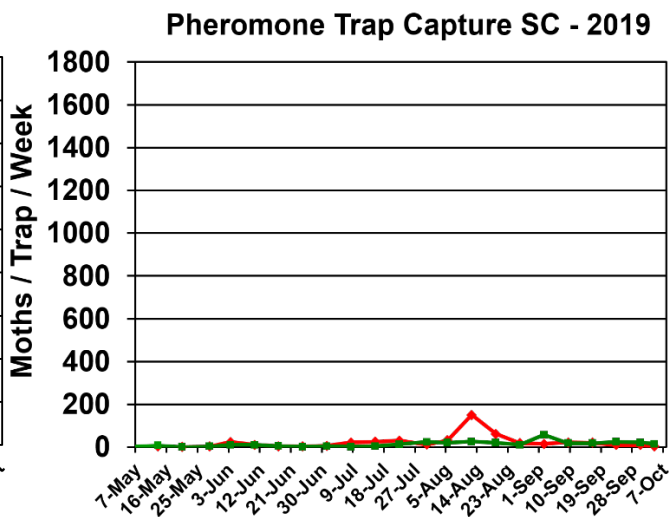
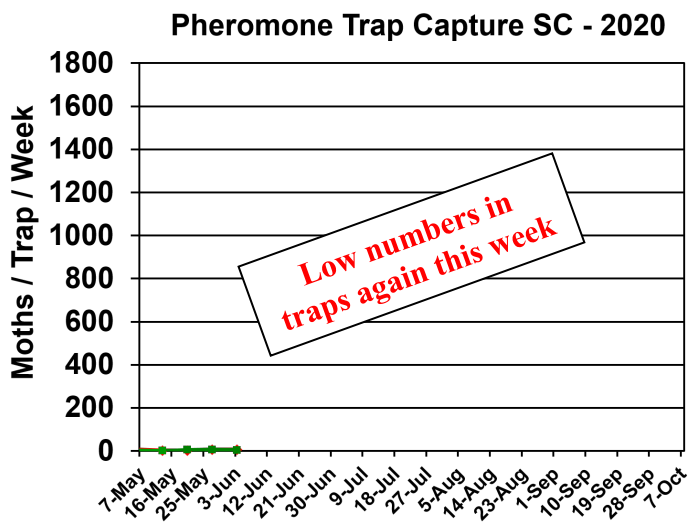
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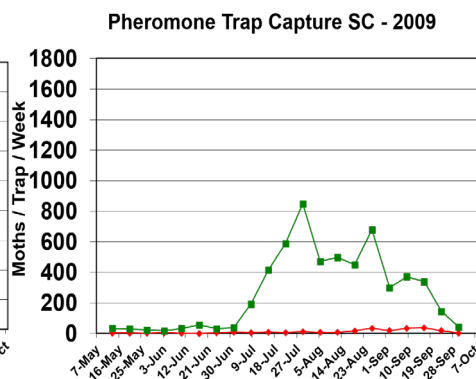
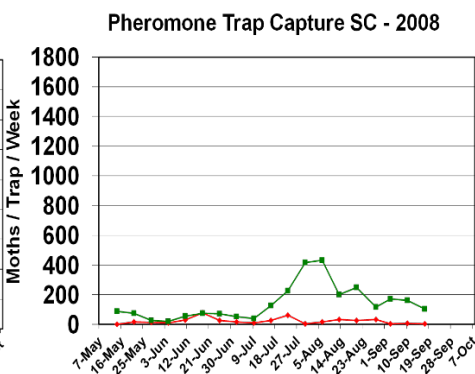
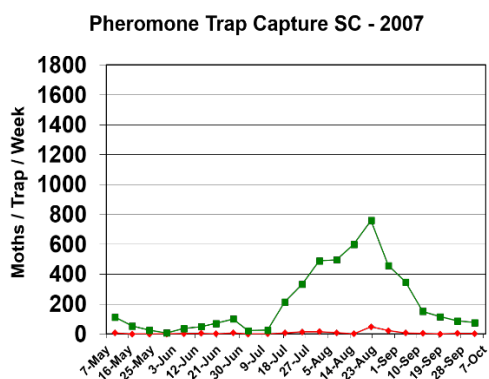
Bollworm & Tobacco Budworm



Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2007-2019 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



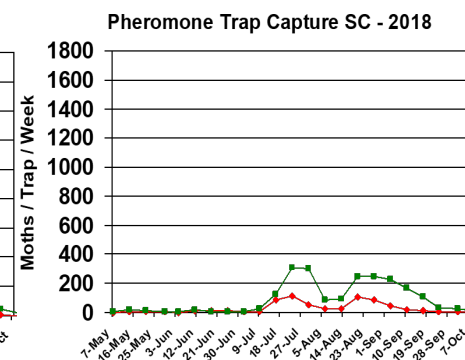
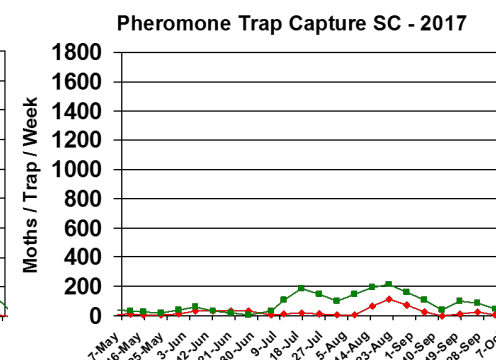
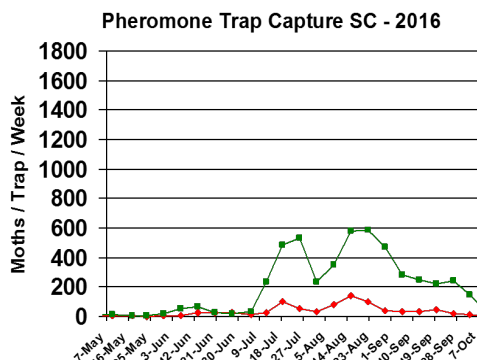
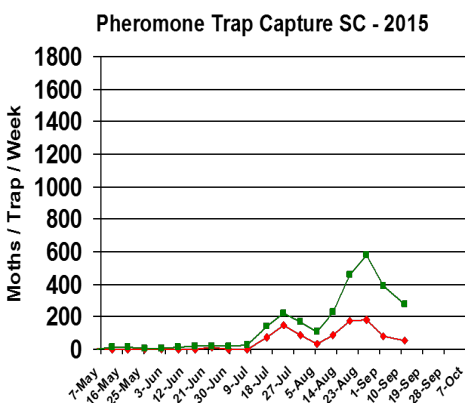
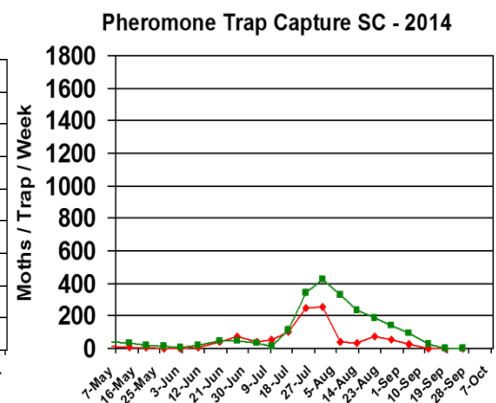
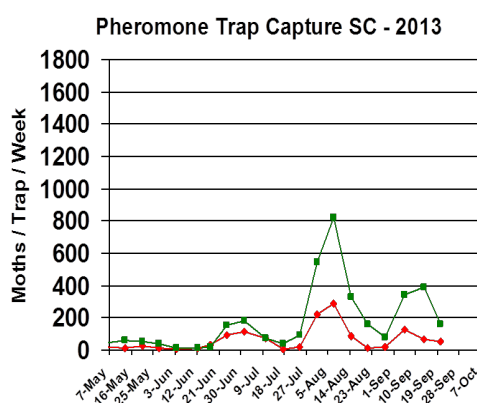
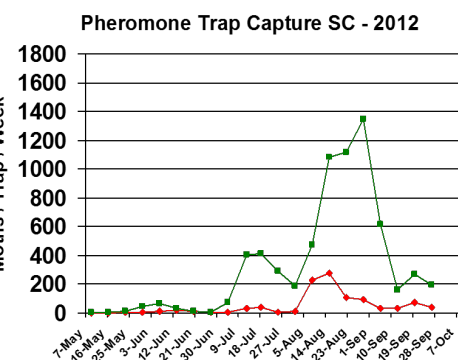
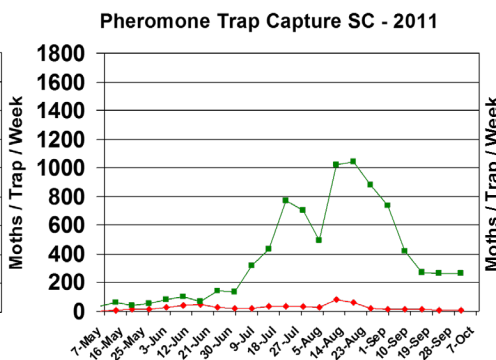
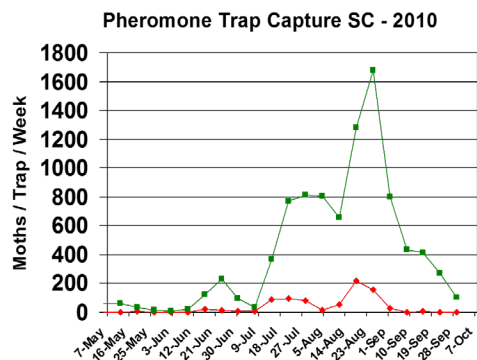
Trap data from 2007-2018 are shown below for reference to other years of trapping data from EREC:



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Pest Management Handbook – 2020

Insect control recommendations are available online in the 2020 South Carolina Pest Management Handbook at:

<https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html>

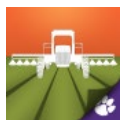
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Download our free mobile apps called “Calibrate My Sprayer” and “Mix My Sprayer” that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats):

<http://www.clemson.edu/extension/mobile-apps/>

Need More Information?

For more Clemson University Extension information: <http://www.clemson.edu/extension/>

For historical cotton/soybean insect newsletters:

<https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html>

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology



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